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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,008	05/04/2007	Axel Unterbeck	MEMORY-34B	7744

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EXAMINER	
SOROUSH, ALI	
ART UNIT	PAPER NUMBER
1616	

MAIL DATE	DELIVERY MODE
05/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/580,008	UNTERBECK ET AL.	
	Examiner	Art Unit	
	ALI SOROUSH	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 March 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,8-14,16-19 and 21-24* is/are pending in the application.

4a) Of the above claim(s) *1-5,8,23 and 24* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-14,16-19,21 and 22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement of Receipt

Applicant's response filed on 03/19/2008 to the Office Action mailed on 02/26/2008 is acknowledged.

Election/Restrictions

Applicant's election without traverse of Group III (claim 9) in the reply filed on 02/26/2008 is acknowledged.

Status of the Claims

Claims 6, 7, 15, and 20 were cancelled, claims 1-5, 8, 23, and 24 are withdrawn as being drawn to non-elected subject matter, and claims 10, 12-14, 16-19, 21 and 22 are currently amended. Therefore claims 9-14, 16-19, 21 and 22 are currently pending examination for patentability.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9-14, 16-19, 21 and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. While being enabling for treating some symptoms of cerebral

insufficiency, the specification does not reasonably provide enablement for the treatment of all symptoms of cerebral insufficiency. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to use the invention commensurate in scope with these claims.

The instant specification fails to provide information that would allow the skilled artisan to practice the instant invention without undue experimentation. Attention is directed to In re Wands, 8 USPQ2d 1400 (CAFC 1988) at 1404 where the court set forth the eight factors to consider when assessing if a disclosure would have required undue experimentation. Citing Ex parte Forman, 230 USPQ 546 (BdApls 1986) at 547 the court recited eight factors: (1) the nature of the invention; (2) the state of the prior art; (3) the relative skill of those in the art; (4) the predictability or unpredictability of the art; (5) the breadth of the claims; (6) the amount of direction or guidance presented; (7) the presence or absence of working examples; and (8) the quantity of experimentation necessary.

(1) The Nature of the Invention: The rejected claims 9-14, 16-19, 21 and 22 are drawn to a method of treating a patient suffering from tinnitus and/or symptoms of cerebral insufficiency comprising administering to the patient an effective amount of (+)-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate.

(2) The state of the prior art: The state of the art regarding treating neurodegenerative disorders such as cerebral insufficiency is relatively high. The skilled artisan would view

that the treatment of all symptoms associated with cerebral insufficiency with only (+)-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate.

(3) The relative skill of those in the art: The relative skill of those in the art is high.

(4) The breadth of the claims: Applicant claims broadly a method of treating a patient suffering from tinnitus and/or symptoms of cerebral insufficiency comprising administering to the patient an effective amount of (+)-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate.

(6) The amount of guidance or direction presented / (7) The presence or absence of working examples: In the instant example applicant has not provided any working examples of administration of (+)-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate to patients suffering from tinnitus and/or cerebral insufficiency nor is data provided as to which symptoms of cerebral insufficiency is treated. Note that lack of a working example is a critical factor to be considered, especially in a case involving an unpredictable and undeveloped art. See MPEP § 2164.

(8) The quantitation of experimentation necessary: In view of the breadth of the claims, unpredictability of preventing or reversing senescence of cells, and the lack of working

examples regarding the activity as claimed, one skilled in the art would have to undergo an undue amount of experimentation to use the instantly claimed invention commensurate in scope with the claims.

For the foregoing reasons claims 9-14, 16-19, 21 and 22 fail to comply with the enablement requirement.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 12, 14, 16-19, and 21 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The use of the trademarks CLOZARIL, ZYPREXA, SEROQUEL, RITALIN, DEXEDRINE, DEXTROSTAT, CYLERT, ADDERALL, PARLODEL, PERMAX, MIRAPEX, TASMAR, COMTAN, KEMADRIN, ARTANE, COGENTIN, PROZAC, ZOLOFT, PAXIL, WELLBUTRIN, ELAVIL, TOFRANIL, PAMELOR, NARDIL, PARNATE, DESYREL, EFFEXOR, VIVACTIL, SINEQUAN, ZYPREXA, TRYPTANOL, SERZONE, RISPERIDAL, HALDOL, FAVERIN, SEROXAT, REMERON, NORTRILENE, and DEPAKOTE have been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Further it should be noted that generic compound names should **not** be capitalized.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Meier et al. (US Patent 5665740, Published 09/09/1997).

Meier et al. teach, “The present invention relates to the new compound rac-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl) 1,4-dihydro-2,6-dimethylpyridine-3,5-dicarboxylate and its pure enantiomers, process for their preparation and their use as medicaments, in particular for the treatment of cerebral and neuronal disorders ..." (See abstract). "In addition to the active compound of the formula (I), the pharmaceutical preparations can also contain other pharmaceutical active compounds." (See column 8, Lines 7-9). “The compound according to the invention and its pure enantiomers exhibit an unpredictable, useful spectrum of pharmacological action. They have a positive effect on learning and memory powers … They have an antidepressant potential …” (See column 6, Lines 38-45). The compound can be employed for the preparation of medicaments for the treatment of central degenerative disorders as for example dementia, Parkinsons diseases, tropical sclerosis, cerebral function disorders

in old age, organic brain syndrome, age associated memory impairment, depression, mania, migraine, neuropathies, addictive disorders and withdrawal symptoms. (See column 7, Lines 46-64). For the foregoing reasons the instant method of treatment is anticipated by the prior art.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Applicant Claims
2. Determining the scope and contents of the prior art.
3. Ascertaining the differences between the prior art and the claims at issue; and resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 10-14, 16-19, and 21are rejected under 35 U.S.C. 103(a) as being unpatentable over Meier et al. (US Patent 5665740, Published 09/09/1997) in view of Sandberg et al. (US Patent 6979698 B1, Published 12/27/2005, Filed 03/15/2000) or Block et al. (US Patent 6440967 B1, Published 08/27/2002).

Applicant Claims

Applicant claims a method of treating a patient suffering from tinnitus and/or cerebral insufficiency comprising administering (+)-isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate and a second active agent.

Determination of the Scope and Content of the Prior Art (MPEP §2141.01)

The teachings of Meier et al. are disclosed above.

Ascertainment of the Difference Between Scope the Prior Art and the Claims (MPEP §2141.012)

Meier et al. lacks a teaching wherein a specific active agent is added. Meier et al. only teach that a second active agent can be added to the formulation. This deficiency is cured by the teachings of Sandberg et al. or Block et al.

Sandberg et al. teach the method of treating cognitive deficits in learning and memory with compositions comprising neuroleptic drugs including haloperidol, sulpiride, risperidone, clozapine, thioridazine, olanzapine, quetiapine, benztropine mesylate and ziprasidone. (See title, column 8, Lines 32-54 and column 12, Lines 49-50).

Block et al. teach a composition comprising GABA alpha 5 inverse agonist and an estrogen in treating cognitive disorders. (See abstract and column 16, Lines 62-67).

Finding of Prima Facie Obviousness Rational and Motivation (MPEP §2142-2143)

It would have been obvious to combine the teachings of Meier et al. with Sandberg et al. or Block et al. One would have been motivated to do because Meier et al. teach that the treatment of cognitive disorders can combine isopropyl 2-methoxyethyl 4-(2-chloro-3-cyano-phenyl)-1,4-dihydro-2,6-dimethyl-pyridine-3,5-dicarboxylate with another drug for the same purpose. One would therefore be motivated to add anyone or more of the compounds taught in Sandberg et al. or Block et al. to enhance the effectiveness of the composition taught by Meier et al. For the foregoing reasons the instant method would have been obvious to one of ordinary skill in the art at the time of the instant invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ali Soroush whose telephone number is (571) 272-9925. The examiner can normally be reached on Monday through Thursday 8:30am to 5:00pm E.S.T.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Johann Richter can be reached on (571) 272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Ali Soroush
Patent Examiner
Art Unit: 1616

/Mina Haghighatian/
Primary Examiner